Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of producing electrodes for a battery comprising the steps of:

processing a metal foil to include ~~at least one of~~ a plurality of concavities and convexities, at least one concavity and an adjacent convexity, adjacent to the at least one concavity, forming a gap in the metal foil therebetween, thereby forming a current collector having a thickness larger than a thickness of the unprocessed metal foil~~, wherein the thickness of the current collector having been subjected to the processing step falls in a range shown by an equation $t1 \geq t2 \geq t1/4$, where t1 is a thickness of a electrode plate and t2 is the thickness of the current collector having been subjected to the processing step~~;

applying an active material layer on both sides of the current collector using a pair of dies;

drying the active material layer; and

pressing the active material layer.

2. (Previously Presented) The method of producing electrodes for a battery according to claim 1, wherein the processing step includes forming the metal foil to have a thickness in a range of 5 to 50 μm.

3. (Canceled)

4. (Previously Presented) The method of producing electrodes for a battery according to claim 1,

wherein the thickness of the current collector having been subjected to the processing step falls in a range shown by an equation $d > t2 \geq d/4$, where d is a gap between tips of a pair of dies and t2 is the thickness of the current collector having been subjected to the processing step.

5. (Previously Presented) The method of producing electrodes for a battery according to claim 1,

wherein said metal foil is electrolytic nickel foil.

6. (Currently Amended) A method of producing electrodes for a battery, comprising the steps of:

processing a metal foil to include ~~at least one of~~ a plurality of concavities and convexities, at least one concavity and an adjacent convexity, adjacent to the at least one concavity, forming a gap in the metal foil therebetween, thereby forming a current collector having a thickness larger than a thickness of the unprocessed metal foil; and

applying an active material on front and back sides of the current collector using a pair of dies such that the active material flows inside dies as well as between a tip of each die and the current collector at a shear rate of 500 (1/sec) or less.

7. (Previously Presented) The method of producing electrodes for a battery according to claim 6,

wherein the pressure of the active material coating between the tip of each die and the current collector is 0.5 MPa or lower.

8. (Previously Presented) The method of producing electrodes for a battery according to claim 1 or 6,

wherein a difference in thickness between the active material layer applied to the front side and applied to the back side of the current collector is within limits of ±30%.

9. (Previously Presented) The method of producing electrodes for a battery according to claim 1 or 6,

wherein a difference in thickness between the active material layer applied to the front side and applied to the back side of the current collector is within limits of ±10%.

10. (Withdrawn) An electrode for a battery comprising:

a current collector formed of a metal foil, said metal foil including at least one of a plurality of concavities and convexities, said current collector having a thickness larger than a thickness of a metal foil without at least one of said plurality of concavities and convexities; and

an active material provided on both sides of said current collector.

11. (Withdrawn) The electrode of claim 10 wherein said thickness of said current collector being in a range from 5 and 50 μm.

12. (Withdrawn) The electrode of claim 10 wherein said thickness of said current collector falls within a range defined by the equation $t1 \geq t2 \geq t1/4$, where t1 is a thickness of an electrode plate and t2 is the thickness of said current collector.

13. (Withdrawn) The electrode of claim 10 wherein said thickness of said current collector falls within a range defined by the equation $d > t2 \geq d/4$, where d is a gap between a pair of dies used to apply said active material to said current collector and t2 is the thickness of said current collector.

14. (Withdrawn) The electrode of claim 10 wherein said metal foil is electrolytic nickel foil.

15. (Withdrawn) The electrode of claim 10 wherein a thickness of a layer of said active material on a front side of said current collector is within ± 30% of a thickness of a layer of said active material on a back side of said current collector.

16. (Withdrawn) The electrode of claim 10 wherein a thickness of a layer of said active material on a front side of said current collector is within ± 10% of a thickness of a layer of said active material on a back side of said current collector.

17. (Withdrawn) An apparatus of producing electrodes for a battery comprising:

means of processing a metal foil to include at least one of a plurality of concavities and convexities, thereby forming a current collector having a thickness larger than a thickness of the unprocessed metal foil;

means of applying an active material layer on both sides of the current collector using a pair of dies;

means of drying the active material layer; and

means of pressing the active material layer.

18. (Withdrawn) An apparatus of producing electrodes for a battery comprising:

means of processing a metal foil to include at least one of a plurality of concavities and convexities, thereby forming a current collector having a thickness larger than a thickness of the unprocessed metal foil; and

means of applying an active material on both sides of the current collector using a pair of dies such that the active material flows inside the dies as well as between a tip of each die and the current collector at a shear rate of 500 (1/sec) or less.

19. (New) The method of producing electrodes for a battery according to claim 1, wherein the thickness of the current collector having been subjected to the processing step falls in a range shown by an equation $t1 \geq t2 \geq t1/4$, where t1 is a thickness of a electrode plate and t2 is the thickness of the current collector having been subjected to the processing step.